



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0498; Directorate Identifier 2014-NM-152-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede Airworthiness Directive (AD) 2007-16-08, which applies to all The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-300, 747-400, 747-400D, and 747SR series airplanes.

AD 2007-16-08 currently requires repetitive inspections for cracking of the station 800 frame assembly, and repair if necessary. Since we issued AD 2007-16-08, we have received additional reports of cracks found at the forward and aft inner chord strap and angles on the station 800 frame on the left-side and right-side main entry doors. This proposed AD would expand the inspection area. We are proposing this AD to detect and correct fatigue cracks that could extend and fully sever the frame, which could result in development of skin cracks that could lead to rapid depressurization of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0498.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0498; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO),

1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432;
fax: 425-917-6590; email: bill.ashforth@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-0498; Directorate Identifier 2014-NM-152-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On July 30, 2007, we issued AD 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007), for all The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-300, 747-400, 747-400D, and 747SR series airplanes. AD 2007-16-08 requires repetitive inspections for cracking of the station 800 frame assembly, and repair if necessary. AD 2007-16-08 resulted from several reports of cracks of the station 800 frame assembly on airplanes that occurred sooner than previously anticipated. We issued AD 2007-16-08 to detect and correct fatigue cracks that could extend and fully sever the frame, which could result in development of skin cracks that could lead to rapid depressurization of the airplane.

Actions Since AD 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007), Was Issued

Since we issued AD 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007), we received additional reports of cracking found at the forward and aft inner chord strap and angles on the station 800 frame on the left-side and right-side main entry doors. These cracks are outside the inspection area of AD 2007-16-08. We have determined that additional inspections are needed. This proposed AD would expand the inspection area to include the station 800 frame between stringer 18 and stringer 30.

Related Service Information under 1 CFR part 51

We reviewed Boeing Alert Service Bulletin 747-53A2451, Revision 2, dated June 13, 2014. The service information describes procedure for inspecting and repairing cracking of the door number 2 forward edge frame assembly at body station 800. Refer to this service information for information on the procedures and compliance times. This service information is reasonably available; see ADDRESSES for ways to access this service information.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

Although this proposed AD does not explicitly restate the requirements of AD 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007), this proposed AD would retain certain requirements of AD 2007-16-08. Those requirements are referenced in the service information identified previously, which, in turn, is referenced in paragraphs (g) and (h) of this proposed AD. This proposed AD would require additional inspections. This proposed AD would require accomplishing the actions

specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the Service Information.”

Differences Between this Proposed AD and the Service Information

Where Boeing Alert Service Bulletin 747-53A2451, Revision 2, dated June 13, 2014, specifies to contact the manufacturer for instructions on how to repair certain conditions, this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Costs of Compliance

We estimate that this proposed AD affects 124 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Repetitive inspections	Up to 53 work-hours X \$85 per hour = \$4,505 per inspection cycle	\$0	Up to \$4,505 per inspection cycle	Up to \$558,620 per inspection cycle

We have received no definitive data that would enable us to provide cost estimates for the on-condition actions specified in this proposed AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007), and adding the following new AD:

The Boeing Company: Docket No. FAA-2015-0498; Directorate Identifier 2014-NM-152-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007).

(c) Applicability

This AD applies to all Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-300, 747-400, 747-400D, and 747SR series airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports of cracks found on the station 800 frame on the left-side and right-side main entry doors (MED), at the forward and aft inner chord strap and angles, which are outside the inspection area of AD 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007). We are issuing this AD to

detect and correct fatigue cracks that could extend and fully sever the frame, which could result in development of skin cracks that could lead to rapid depressurization of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspections of Station 800 Frame Assembly Between Stringer 14 and Stringer 30

Except as required by paragraph (i) of this AD, at the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 747-53A2451, Revision 2, dated June 13, 2014: Do a detailed inspection for cracking in the inner chord strap, angles, and exposed web adjacent to the inner chords, and do surface and open hole high-frequency eddy current (HFEC) inspections for cracking in the inner chord strap and angles of the station 800 frame assembly between stringer 14 and stringer 30, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2451, Revision 2, dated June 13, 2014. Repeat the inspections at the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 747-53A2451, Revision 2, dated June 13, 2014.

(h) Repair of Cracking

If any cracking is found during any inspection required by paragraph (g) of this AD, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

(i) Exception to the Service Information

(1) Where Boeing Alert Service Bulletin 747-53A2451, Revision 2, dated June 13, 2014, specifies a compliance time “after the Revision 2 date of this service bulletin,” this AD requires compliance within the specified time after the effective date of this AD.

(2) The Condition column of paragraph 1.E., “Compliance,” of the Boeing Alert Service Bulletin 747-53A2451, Revision 2, dated June 13, 2014, refers to total flight cycles “as of the Revision 2 date of this service bulletin.” This AD, however applies to airplanes with the specified total flight cycles or total flight hours as of the effective date of this AD.

(j) Credit for Previous Actions

This paragraph provides credit for the inspections and repairs of the inner chord strap and angles of the station 800 frame assembly between stringer 14 and stringer 18 required by paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 747-53A2451, Revision 1, dated November 10, 2005.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to:

9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO, to make those findings. For a repair method to be approved,

the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved for AD 2007-16-08, Amendment 39-15147 (72 FR 44728, August 9, 2007), are approved as AMOCs for the corresponding provisions of this AD.

(I) Related Information

(1) For more information about this AD, contact Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432; fax: 425-917-6590; email: bill.ashforth@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on March 19, 2015.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2015-07081 Filed: 3/27/2015 08:45 am; Publication Date: 3/30/2015]